

**IN THE CLAIMS**

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1. (Twice Amended) A water soluble hemicellulose-based composition comprising:  
non-cellulosic, non-starch hemicellulose material;  
an oxidase; and  
an oxidase substrate;  
wherein the hemicellulosic material comprises at least one polysaccharide and at least one polysaccharide is arabinoxylan ferulate.

2. (Twice Amended) The composition of claim 1 further comprising a peroxidase.

3. (Twice Amended) The composition of claim 1, wherein the hemicellulose material is derived from cereal, husk or bran, straw, or from legumes.

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7. (Twice Amended) The composition of claim 1, wherein said composition is in the form of a powder.

8. (Twice Amended) The composition of claim 7, which further comprises peroxidase, the material being self-gelling on the addition of water.

9. (Twice Amended) The composition of claim 1, wherein the composition is in the form of an aqueous solution.

10. (Twice Amended) The composition of claim 9, which is substantially free of molecular oxygen.

11. (Twice Amended) The composition of claim 10, which further comprises peroxidase and which is self-gelling on exposure to molecular oxygen.

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B2  
12. (Twice Amended) A gel or viscous medium comprising the composition of claim 1, which has been oxidatively gelled.

13. (Twice Amended) The gel of claim 12, wherein the composition comprises cross linked arabinoxylan ferulate.

16. (Twice Amended) A process for preparing a gel or viscous medium comprising the step of oxidatively gelling the composition of claim 1.

B3  
17. (Twice Amended) A process for effecting oxidative gelation of a water soluble hemicellulose-based composition comprising non-cellulosic, non-starch hemicellulose material, wherein the hemocellulosic material comprises at least one polysaccharide and at least one polysaccharide is arabinoxylan ferulate, comprising promoting the generation of hydrogen peroxide *in situ* by redox enzymes, said generation comprising the steps of:

- (a) providing oxygen to the composition and/or
- (b) providing water to the composition; and/or
- (c) providing oxidase substrate to the composition; and/or
- (d) activating one or more of the redox enzymes.

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19. (Twice Amended) The process of claim 17, wherein the process comprises the step of supplementing the hemicellulose material with an oxidase.

20. (Twice Amended) The process of claim 18, wherein the generation of hydrogen peroxide is promoted by:

- (a) providing oxygen to the composition and/or
- (b) providing water to the composition; and/or
- (c) providing oxidase substrate to the composition; and/or
- (d) activating one or more of the redox enzymes.

B5  
22. (Twice Amended) A process for producing the hemicellulosic composition of claim 1 comprising the step of supplementing a hemicellulose with an oxidase.

23. (Twice Amended) A composition produced by the process of claim 22.

B6  
26. (Twice Amended) A wound dressing comprising the composition of claim 11.

B7  
28. (Twice Amended) A foodstuff, dietary fiber source, food ingredient, additive, lubricant, supplement or dressing comprising the composition of claim 1, being selected from the group consisting of a petfood, a flavour delivery agent, a canning gel, fat replacer, a coating, a glaze, a bait and a gelatin replacer.

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30. (Amended) The composition of claim 1, wherein the oxidase is glucose oxidase.

31. (Amended) The composition of claim 2, wherein the peroxidase is horse radish peroxidase.

32. (Amended) The composition of claim 2, wherein the oxidase substrate is glucose.

33. (Amended) The composition of claim 3, wherein the hemicellulose material is selected from the group consisting of maize, wheat, barley, rice, oats and malt.

34. (Amended) The composition of claim 1, wherein the hemicellulose material is derived from testaceous plant material containing at least about 20% of at least one of arabinoxylan or glucoronoarabinoxylan.

35. (Amended) The composition of claim 7, wherein the powder is substantially anhydrous and further comprises a dispersant.

36. (Amended) The composition of claim 35, wherein the dispersant is selected from the group consisting of glucose and maltodextrin.

37. (Amended) The composition of claim 7, wherein the oxidase substrate is glucose.

38. (Amended) The composition of claim 11, wherein the oxidase substrate is glucose.

39. (Amended) The process of claim 16, wherein the oxidative gelling comprises adding water to the composition or exposing the composition to molecular oxygen.

41. (Amended) The composition of claim 18, wherein the oxidase is a glucose oxidase.

42. (Amended) The composition of claim 18, wherein the peroxidase is horse radish peroxidase.

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53. (Amended) A foodstuff, dietary fiber source, food ingredient, additive, lubricant, supplement or dressing comprising the composition of claim 23, being selected from the group consisting of a petfood, a flavour delivery agent, a canning gel, fat replacer, a coating, a glaze, a bait and a gelatin replacer.

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57. (Amended) The gel of claim 13, wherein the composition consists essentially of cross linked arabinoxylan ferulate.

Please add the following new claims:

58. (New) The process of claim 19, wherein the step of supplementing the hemicellulose material further comprises an oxidase substrate and/or a peroxidase.

B11  
59. (New) The process of claim 22, wherein the step of supplementing the hemicellulose material further comprises a peroxidase.